



black sandshell

Ligumia recta

Kingdom: Animalia
Division/Phylum: Mollusca
Class: Bivalvia

Features

The black sandshell mussel is elongate, solid, and moderately compressed. The anterior end is rounded and the posterior is tapered in males and rounded in females. The dorsal margin is straight and the ventral margin may be straight or curved. The outside of the shell is smooth and shiny. It is dark green, brown, or black with green rays visible in some. The inside of the shell varies from white, pink, and salmon to deep purple. It is iridescent toward the posterior end. The black sandshell may reach lengths up to eight inches.

Natural History

The black sandshell is found in medium to large rivers in riffles or raceways in gravel or firm sand. Its distribution in Iowa is not well documented. Freshwater mussels have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to

the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Host fish for this mussel include several widespread common fish. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

interior rivers and streams; Mississippi River

Iowa Status

uncommon; native

Iowa Range

northeastern three-fourths of Iowa

Bibliography

Iowa Department of Natural Resources. 2001.
Biodiversity of Iowa: Aquatic Habitats CD-ROM.